Please amend the claims as follows:

1. (amended) A system for determining an intracorporal [the intracorporation] position of a working catheter [(10)], comprising

a working catheter [(10) which is adapted to carry] for carrying out desired working operations, and

an intracorporal reference catheter [(2) which is adapted to produce] for producing a co-ordinate system,

wherein [characterised in that] the working catheter [(10)] has a plurality of working catheter reference units [(4a-c) which are adapted to send] for sending signals which are characteristic for the position of the working catheter [(10)], and

the reference catheter [(3)] has a plurality of reference catheter reference units [(14) which are adapted to receive] for receiving the signals sent by the working catheter reference units [(4)], and

[the system further has] a processing unit [(16) which is adapted to calculate] for calculating the position and an [the] intracorporal orientation of the working catheter [(10)] on the basis of signals received from the reference catheter reference units [(14a, 14b)].

2. (amended) The [A] system as set forth in claim 1

wherein the working catheter [(10)] is a mapping catheter for generating a three-dimensional image of the heart cavity surrounding the mapping catheter.

3. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims]

wherein the working catheter [(10)] is an ablation catheter for producing a [preferably linear] lesion of the endocardium surrounding the ablation catheter.

4. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims]

wherein the working catheter [(10)] is a catheter which can be fixedly implanted in a body and which carries electrodes of a cardiac pacemaker or a defibrillator.

5. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims]

wherein the working catheter reference units [(4a-c)] are asymmetrically arranged on the working catheter so [(10) asymmetrically, preferably forming the corners of a triangle, in

such a way] that the orientation of the working catheter [(10)] can be detected in the co-ordinate system of the reference catheter [(2)].

6. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein the reference units [(4, 14)] are coils or ultrasonic crystals mounted on or in the catheter.

(amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein at least one reference unit [(4a)] is arranged at the catheter tip [(30) while] and

at least one further reference unit [(4b, c)] is arranged in the rest of the distal region [(12)] of the catheter [(10), wherein preferably a whole series of reference units, more preferably between twelve and twenty four reference units, is arranged in the distal region (12)].

8. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein the distal region [(12)] of the working catheter [(10)] is of a previously established specific shape [, preferably that of a circular arc,] on which distal region at least three reference units [(4)] are distributed so that the specific, previously established shape of the distal region [(12)] can be incorporated by the processing unit [(16)] when ascertaining the position of the working catheter by [(10) when] calculating the position of the working catheter [(10)].

9. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein either the reference catheter [(2)] is also a working catheter [(10)] or the working catheter [(10)] is also a reference catheter , such that [(2) insofar as provided on each catheter are respective] reference units [(4, 14)] for transmitting waves and reference units [(4)] for receiving waves are provided on each catheter [, preferably electromagnetic and/or ultrasonic waves, and/or provided on each catheter are respective reference units (4, 14) which can simultaneously transmit and receive the waves, preferably electromagnetic waves].

10. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims]

wherein the processing unit [(16)] is adapted by means of the reference units [(4)] to implement topological and/or electrical measurement of the endocardium in which the respective working catheter [(10)] is disposed.

11. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein the reference catheter reference units [(14a, b) are adapted to] irradiate electromagnetic radiation and/or ultrasonic waves [in order] to ascertain the position of the working catheter [(10)] in the co-ordinate system afforded by the reference catheter [(2)], wherein the reference catheter reference units [(14a, b)] build up at least one electromagnetic field.

12. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein [in use of the system] the reference catheter is placed in the coronary sinus for use of the system in the heart [the reference catheter (2) is preferably placed in the coronary sinus].

13. (amended) The [A] system of claim1, [as set forth in one of the preceding claims] wherein the processing unit [(16) is adapted to calculate] calculates a three-dimensional spline that represents the position of the working catheter in the reference catheter co-ordinate system from the data from the at least three working catheter reference units [(4a-c) a three-dimensional spline which represents the position of the working catheter (10) in the co-ordinate system defined by the reference catheter].

14. (amended) The [A] system of claim1, [as set forth in one of the preceding claims] wherein the processing unit [(16)] is integrated in the respective catheters.

15. (amended) The [A] system of claim1, [as set forth in one of the preceding claims] wherein at least one of the reference units is [in the form of] a sensor for detecting the presence and/or the strength of the wall contact of the working catheter [(10)] with the endocardium surrounding the catheter.

16. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein the system has between two and five [at least two and preferably five] working catheters [(10)], wherein each catheter has between three and twenty-four [at least

three and preferably between twelve and twenty four] reference units which [more preferably] are [in the form of] electrodes [and still more preferably in the form of ring electrodes in order thus] to detect the corresponding number of potential differences in the case of working catheters inserted into a cavity in a heart.

17. (amended) The [A] system of claim 16, [as set forth in one of the preceding claims] wherein the [reference units are in the form of] electrodes are [, preferably] ring electrodes.

18. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein the reference units are [which are preferably in the form of] electrodes [, more preferably ring electrodes,] that are actuatable simultaneously by the processing unit [(16)].

19. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] wherein the working catheter has [(10) is provided with a number of] at least two electrodes [which are preferably in the form of ring electrodes and which are] mounted on the working catheter at different locations from the reference units [(4)], wherein , relative [in relation] to the electrodes , the reference units [(4)] are in a previously established specific spatial position that [which] can be taken into account by the processing units [(16)] when ascertaining the position of the working catheter [(10)] in the co-ordinate system defined by the reference catheter [(2)].

20. (amended) The [A] system of claim 1, [as set forth in one of the preceding claims] comprising

control members [(24, 26)] at the proximal end of the working catheter [(10), which are adapted to produce] for producing a rotation of the working catheter [(10)] and/or a flexing of the distal end [(12)] of the working catheter [(10)].

21. (amended) The [A] system of claim 20, [as set forth in one of the preceding claims] comprising

a first signal line , extending [(34) which extends] from the distal tip [(30)] to the proximal end of the working catheter [(10)] and connecting [which is connected] to the working catheter reference units [(4a-c)], and

a second signal line , extending [(35) which extends] from the distal tip to the proximal end of the reference catheter [(2)] and connecting [which is connected] to the reference catheter reference units [(14a, b)],

wherein the processing unit [(16)] is connected by way of the first signal line [(34)] to the working catheter reference units [(4)] and by way of the second signal line [(35)] to the reference catheter reference units [(14)], and

wherein the processing unit [(16)] is connected to the control members [(24, 26) and is adapted to actuate] actuates the control members [(24, 26)] in response to the signals from the reference catheter reference units [(14a, 14b)] in order to produce a rotation or a flexing of the working catheter [(10)].

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22. (amended) A working catheter having a distal tip [(30)] and a proximal end for use in a system as set forth in claim 1

characterised by

reference units for sending [(4a-c) which are adapted to send] signals which are characteristic for the position of the working catheter [(10)], and

a signal line [(34)] which extends from the distal tip [(30)] to the proximal end of the working catheter and which is connected to the reference units [(4a-c)].

23. (amended) A reference catheter having a distal tip and a proximal end for use in a system as set forth in claim 1

characterised by

reference units for receiving [(14a, b) which are adapted to receive] position signals, and

a signal line [(35)] which extends from the distal tip to the proximal end of the reference catheter and which is connected to the reference units [(14a, b)].

Please add the following new claims:

24. (new) The system of claim 3,

wherein the ablation catheter produces a linear lesion.

N. E already present.

25. (new) The system of claim 2,

wherein the working catheter is a catheter which can be fixedly implanted in a body and which carries electrodes of a cardiac pacemaker or a defibrillator.

26. (new) The system of claim 3,

wherein the working catheter is a catheter which can be fixedly implanted in a body and which carries electrodes of a cardiac pacemaker or a defibrillator.

27. (new) The system of claim 4,

wherein the working catheter reference units are asymmetrically arranged on the working catheter so that the orientation of the working catheter can be detected in the co-ordinate system of the reference catheter.

28. (new) The system of claim 25,

wherein the working catheter reference units are asymmetrically arranged on the working catheter so that the orientation of the working catheter can be detected in the co-ordinate system of the reference catheter.

29. (new) The system of claim 26,

wherein the working catheter reference units are asymmetrically arranged on the working catheter so that the orientation of the working catheter can be detected in the co-ordinate system of the reference catheter.

30. (new) The system of claim 5,

wherein the working catheter reference units are arranged to form the corners of a triangle.

31. (new) The system of claim 27,

wherein the working catheter reference units are arranged to form the corners of a triangle.

32. (new) The system of claim 28,

wherein the working catheter reference units are arranged to form the corners of a triangle.

33. (new) The system of claim 29,

wherein the working catheter reference units are arranged to form the corners of a triangle.

34. (new) The system of claim 5,

wherein the reference units are coils or ultrasonic crystals mounted on or in the catheter.

35. (new) The system of claim 27,

wherein the reference units are coils or ultrasonic crystals mounted on or in the catheter.

36. (new) The system of claim 28,

wherein the reference units are coils or ultrasonic crystals mounted on or in the catheter.

37. (new) The system of claim 29,

wherein the reference units are coils or ultrasonic crystals mounted on or in the catheter.

38. (new) The system of claim 6,

wherein at least one reference unit is arranged at the catheter tip and

at least one further reference unit is arranged in the rest of the distal region of the catheter.

39. (new) The system of claim 34,

wherein at least one reference unit is arranged at the catheter tip and

at least one further reference unit is arranged in the rest of the distal region of the catheter.

40. (new) The system of claim 35,

wherein at least one reference unit is arranged at the catheter tip and

at least one further reference unit is arranged in the rest of the distal region of the catheter.

41. (new) The system of claim 36,
wherein at least one reference unit is arranged at the catheter tip and
at least one further reference unit is arranged in the rest of the distal region of the catheter.

42. (new) The system of claim 37,
wherein at least one reference unit is arranged at the catheter tip and
at least one further reference unit is arranged in the rest of the distal region of the catheter.

43. (new) The system of claim 7,
wherein the at least one further reference unit is a plurality of said reference units.

44. (new) The system of claim 43,
wherein there are at least twelve said further reference units arranged in the rest of the distal region of the catheter.

45. (new) The system of claim 43,
wherein there are fewer than twenty-four further reference units arranged in the rest of the distal region of the catheter.

46. (new) The system of claim 8,
wherein the previously established specific shape is a circular arc.

47. (new) The system of claim 9,
wherein either the reference catheter is also a working catheter or the working catheter is also a reference catheter , such that reference units for simultaneously transmitting waves and receiving waves are provided on each catheter.

48. (new) The system of claim 9,
wherein the waves transmitted or received by the reference units are electromagnetic.

49. (new) The system of claim 47,

wherein the waves transmitted or received by the reference units are electromagnetic.

50. (new) The system of claim 9,
wherein the waves transmitted or received by the reference units are ultrasonic.

51. (new) The system of claim 47,
wherein the waves transmitted or received by the reference units are ultrasonic.